

**METHODS OF INHIBITING PIN1-ASSOCIATED  
STATES USING A FREDERICAMYCIN A COMPOUND**

**Abstract**

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This invention provides a method for treating a Pin1-associated state in a subject including administering to a subject an effective amount of a fredericamycin A compound such that the Pin1-associated state is treated. In another aspect, this invention includes the above described method, wherein the Pin1-associated state is a

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cyclin D1 elevated state, neoplastic transformation, and/or tumor growth. In an embodiment, this invention provides the above described methods, wherein the Pin1-associated state is colon cancer, breast cancer, a sarcoma, a malignant lymphoma, and/or esophageal cancer. This invention also provides a method for treating cyclin D1 overexpression in a subject including administering to a subject an effective amount of a

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combination of a fredericamycin A compound and a hyperplastic inhibitory agent such that the cyclin D1 overexpression is treated.